

organ thus impregnated to grow and develop itself during the early months of pregnancy, in the retroverted or retroflexed position. When an ovum is deposited in the retroverted uterus, the enlargement of the organ causes a greater sense of weight and pressure in the pelvis than ordinary pregnancy. The os uteri approaches the pubis, and the fundus projects towards the hollow of the sacrum. The fundus is found to enlarge considerably when examined from time to time by the finger. At length, unless the pelvis is of very large size, the bladder and rectum are pressed upon so as to interfere with their functions, and difficult micturition and defecation, especially the former, are the results. Owing to the retention of the gravid uterus within the pelvis, there is little or no increase in the size of the abdomen. There is usually a great amount of pain and discomfort in the lower part of the back, and the sympathetic affections of pregnancy are frequently more severe than usual. Abortion very frequently occurs from the mechanical irritation of the uterus." After making some further general observations to prove the strength of his argument, Dr. Tyler Smith proceeds to say: "In conclusion, I may observe that it seems to me the great use of the knowledge of the mode in which retroversion of the gravid uterus occurs will be in the prevention of the full retroversion—or strangulation, as I have ventured to term it—of the gravid uterus in the pelvis. As long as retroversion was supposed to take place suddenly and mysteriously, little could be done to avert it; but if, as I believe, the displacement dates from the very beginning of pregnancy, in the great majority of cases, we may do much by position, and attention to the bowels and bladder, to prevent any dangerous symptoms; and, aware of the condition of the uterus beforehand, we shall be more ready to give prompt mechanical assistance when it becomes necessary to pass the hand into the vagina to carry the fundus above the brim. When retroversion has existed in early pregnancy, but has been relieved spontaneously or otherwise by the ascent of the fundus, labour takes place without any unusual difficulty. We ought, however, in the management of the puerperal state, to endeavour to prevent a return of the uterine displacement. The occurrence of pregnancy is rather favourable than otherwise to the cure of retroversion. In the latter months of pregnancy the fetus acts as an intra-uterine pessary; the organ is strengthened, and in the return of the uterus to the size of the unimpregnated state by the process of involution we have a better chance of curing retroversion than under any other circumstances. The abdominal bandage should not be tight enough to force the uterus into the pelvis. The patient should be encouraged to lie on her right or left side, inclining to the prone position, but avoiding recumbency. The bladder should be frequently relieved, and any violent straining during defecation avoided. She should remain in bed or on a couch longer than usual, and before resuming her ordinary duties the condition of the uterus should be ascertained; and if any tendency to a return of retroversion exists, an air-pessary should be worn in the vagina as long as may be necessary to insure a right position to the uterus. Several other cases of retroversion of the unimpregnated uterus, followed by retroversion in the gravid state, have fallen under my observation, besides those related in the present paper; but as they would only be a repetition of those already detailed, I will not trouble the Society with the particulars of them. What has happened in my own practice must necessarily have occurred in that of others; and probably it is only necessary that the matter should be understood, for the production of a number of well-authenticated cases of the same kind by those engaged in obstetric practice. I must now leave it to the Society to decide whether the facts and observations which have been adduced do not prove that the Hunterian theory of gravid retroversion is no longer tenable; and whether we must not in future look upon retroversion of the unimpregnated state, which is well known to be a common affection, frequently admitting of impregnation, as the principal cause of retroversion of the gravid organ. In raising this discussion, I would yield to no one in veneration for the name of William Hunter, as being undoubtedly one of the greatest and most honoured names in obstetric science."—*Med. Times and Gaz.*, Nov. 17, 1860.

34. *New Sign of Post-partum Detachment of the Placenta.* By JOHN CLAY, Senior Professor of Midwifery in Queen's College, Birmingham.—The rules usually given in obstetric manuals and text-books for the management of the placenta

after the birth of the child are—to wait for a pain; or to carry the finger along the cord to the os uteri, and if its root can be felt, it may be fairly assumed that the placenta is thrown off, and may be easily extracted by gentle traction of the cord, with the aid of external manipulation. If these instructions be faithfully carried out, can we rely upon the facts elicited as infallible proofs that the placenta is separated from the uterus? Pain may mislead, as it frequently arises from other causes than contractions of the uterus; and even if the insertion of the cord can be felt, it is not always conclusive on this point, as the root of the cord may sometimes be felt when the uterus is in a flaccid condition, by using moderate traction on the cord, and yet the placenta be not thrown off. Besides, the patient often lustily complains of the smarting pains caused by the frequent examinations deemed necessary to ascertain the fact; and often she positively forbids such a mode of interference.

Four years ago I was led, from these causes, to investigate the subject, with the view of improving, if possible, upon the old mode of managing the deliverance of the after-birth. I thus ascertained certain facts from which I came to the conclusion that a very simple sign existed by which the separation of the placenta, after the birth of the child, might be indicated; and, having tested it in upwards of nine hundred cases, I hope I may be considered to be fairly entitled to lay the results at which I have arrived before the profession.

Before dividing the umbilical cord, I always apply two ligatures, and make both sufficiently tight to prevent the occurrence of hemorrhage. If the maternal part of the cord is now examined, it will be found to be in a flaccid condition, and almost free from blood; but if it be again examined, at an interval, say from one to three minutes, it will be found to have acquired increased specific weight, and that the vessels are more or less filled with blood. The one fact may be ascertained by poisoning the cord on the fingers; the other by slightly grasping the cord near the vagina, with the thumb and fore-finger of the left hand, and with the fingers of the right hand suddenly compressing it, when a well-marked sense of fluctuation is perceived underneath the fingers of the left hand—a kind of resilience similar to the feeling produced when an elastic tube filled with fluid is suddenly compressed.

When the placenta is thrown off, or sufficiently detached to give rise to a tolerably free hemorrhage, the cord loses its increased specific weight and the hydrostatic property just mentioned. These phenomena occur so invariably, that *the loss of the previously acquired hydrostatic properties of the cord after the birth of the child constitutes the sign of detachment* previously referred to.

The whole of the phenomena are manifested in three stages, viz: 1st, a state of flaccidity; 2d, a state of repletion; 3d, a state of flaccidity.

If the umbilical cord be tightly grasped by a spasmodic contraction of the os uteri, or by irregular contractions of the body of this organ, the *loss* of the particular hydrostatic properties may be delayed for a brief interval; but in a few seconds the spasm subsides, and those phenomena are produced which indicate the separation of the placenta, and that this structure may be safely extracted. These signs are not, of course, always equally marked in every case, often requiring experienced tactile management in order to detect their presence. When the uterus is in a flaccid condition, the phenomena are manifested in a very slight degree, but are still perfectly reliable. On the other hand, when the uterus is contracted, with some degree of firmness, on the placenta, they are so well marked that the most inexperienced may readily detect them. In cases of partially adherent placenta, the disappearance of the hydrostatic properties, after being once fully developed, and the failure to deliver the placenta by the usual manipulations, have always indicated to me the necessity of promptly adopting artificial detachment by the introduction of the hand. In twin cases, if the cord is firmly tied, I have invariably found that the signs persisted until the birth of the second child. In one case, where the hydrostatic properties disappeared, after being well marked, before the birth of the second child, I found, on examination, that the corresponding placenta was detached, and I at once removed it, which otherwise would probably have been suffered to remain. Neither mother nor child incurred any risk.

It sometimes occurs that the placenta is separated simultaneously with the

birth of the child. In this instance the first series of phenomena may be absent, and it may be prudent to wait before proceeding to extract the placenta, although it may be generally effected with safety.

The practical value of the application of these facts to obstetrics is obvious, as by merely compressing the cord in the manner previously indicated the precise time of separation may be easily ascertained, the placenta at once extracted, and the patients thus freed from those frequent annoying examinations usually employed. The prompt delivery of the placenta, on the first efforts of the uterus, is very important, as this organ contracts then more efficiently, and the risk of hemorrhage is not so great, and it may be fairly assumed that the puerperal convalescence is not so protracted as under a more dilatory proceeding.

To students, or inexperienced practitioners, it might be a safe instruction to impart—not to interfere in the extraction of the placenta so long as the hydrostatic properties herein defined are persistent.—*Dublin Quart. Journal of Med. Science*, Nov. 1860.

35. *Cases of Inversion of the Uterus*.—Dr. BRANDT related to the Berlin Obstetrical Society two cases of inversion of the uterus which he had met with. He was called to the first on account of a fearful hemorrhage which had immediately followed the birth of a third child. He found the woman almost pulseless in a pool of blood, various means for arresting the hemorrhage, including the plug, having been tried in vain. The plug having been removed, it was at once discovered that an inversion was the cause of the nearly fatal hemorrhage. Reposition was accomplished with ease, and the bleeding at once ceased. The woman, though still anæmic, was enabled to leave her bed on the ninth day, and the lactation was normal. The second case was a primipara, aged 30, and a hemorrhage which had followed the removal of the placenta had continued forty-eight hours, notwithstanding attempts to arrest it, when the author saw her. She was then anæmic and nearly speechless, her feeble pulse beating 140. After putting her under the influence of chloroform, reposition was accomplished without further loss of blood, the organ contracted and the patient was relieved of the pains she had complained of. Some ergot was also afterwards given, and next day the contraction of the organ was found to be quite normal. The further progress of the case, however, was unsatisfactory, as the patient fell into a typhoid state, with subsequent œdema and metastatic abscesses; and at the period of the report, two months after delivery, she was still in a precarious condition. Dr. Brandt, in regard to the production of the accident in these cases, stated that, although it was the interest of the midwives to hasten the termination of the labour, he had no proof that they had acted improperly.

Professor Martin referred to two cases which had occurred in his own practice, in one of which the inversion seemed to have been produced by the traction of the cord made by the midwife. In the other case, which was an old one, the cause was doubtful. Indeed, it was only a partially-inverted uterus, and had been supposed to be a polypus. The diagnosis was made, first, by estimating the length of the organ between the two hands placed within and outwardly, and then by the introduction of the uterine sound, which could be carried around the prolapsus part, but passed in nowhere to a greater depth than an inch. Only palliative treatment was resorted to. Dr. Mayer referred to two cases formerly related by him to the Society, in which he was certain the occurrence was not produced by any external means as he was present at the labours; and the expulsion of the placenta was left to Nature. He attributed it to the shortness of the funis. He referred likewise to a third case which had been also spontaneously produced. With regard to the diagnosis of old cases, he had found the sensibility of the part a never-failing aid. A polypus is completely insensible; but the inverted uterus, is possessed of so much sensibility that if we scratch its surface with the nail, the patient is enabled to tell us the kind of action performed. Still, the diagnosis is sometimes excessively difficult, and he remembered a practitioner of high renown having well nigh passed a ligature around the inverted fundus. Dr. Kauffmann referred to a case in which reposition was accomplished after three-quarters of an hour's effort, through an